

Residential Development
Coverdale Crescent, Ardwick, Manchester
Transport Statement
231204/SK22361/TS01(-03)

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Project	Document	Rev	Description	Authorised by	Signed	Date
SK22361	TS	00	Draft	L Speers	LGS	21/09/2023
SK22361	TS	01	Submission	L Speers	LGS	12/10/2023
SK22361	TS	02	C3 Update	L Speers	LGS	01/12/2023
SK22361	TS	03	Final Draft	L Speers	LGS	04/12/2023

1 Introduction

- 1.1 SK has been appointed to prepare a Transport Statement (TS) that examines the impact of a C3(a) residential development off Coverdale Crescent in the Ardwick area of Manchester. The proposal will provide 24 flats. The site layout is attached as Appendix A.
- 1.2 The TS has been undertaken in line with the following policy guidance:
 - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places
 - Department for Levelling Up, Housing & Communities (2021), Planning Practice Guidance
 - Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework
 - Manchester City Council (2007), The Guide to Development in Manchester SPD
 - Manchester City Council (2012), Manchester's Local Development Framework: Core Strategy Development Plan
 - Transport for Greater Manchester (2013), Transport for Sustainable Communities
 - TRICS (2022), TRICS Good Practice Guidance 2023

2 Baseline Situation

Site Location & Characteristics

- 2.1 Figure 2.1 shows the location of the site.
- 2.2 The site is in Ardwick, to the south of the A57 Hyde Road and north of the A6 Stockport Road. The site is well located for access to local amenities, such as local retail facilities fronting Stockport Road, and public transport services.
- 2.3 The site is bounded to the north by Coverdale Crescent, to the east by residential properties, to the south by Devonshire House, and to the west by the A665 Devonshire Street.

Local Highway Network

- 2.4 Near the site, Coverdale Crescent is a 7.6m single carriageway road with a 2.5m – 3.5m footway on the southern side of the road (site-side). The road is subject to a 20mph speed limit and traffic calming features are in place (raised tables). The road has street lighting.
- 2.5 Travelling east on Coverdale Crescent provides access to residential properties to the east of the site.
- 2.6 At its western end, on the corner of the site, Coverdale Crescent meets Devonshire Street and Hellidon Close at a crossroad priority junction. Dropped kerbs are present on the Coverdale Crescent arm of the junction, but no tactiles are provided.
- 2.7 Devonshire Street in the vicinity of the site is a 10m single carriageway road with 3m footways on both sides of the road. The road is subject to a 30mph speed limit and street lighting is provided.
- 2.8 Travelling south on Devonshire Street provides access to Stockport Road. Stockport Road (A6) is part of the Key Route Network and is an important bus route corridor. Dropped kerbs with tactile paving are provided on the route to Stockport Road. The Devonshire Street / Stockport Road junction is signal controlled with advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossings can be used to access westbound bus stops located to the east and west of the junction. Further crossing facilities are available on Stockport Road, including a pedestrian refuge crossing, signal controlled crossing and tactile paving / dropped kerbs at side roads.
- 2.9 To the north of Devonshire Street meets Hyde Road at a signal-controlled junction. Hyde Road (A57) is part of the Key Route Network and is an important bus route corridor. The junction has advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossing facilities can be used to access eastbound bus stops.

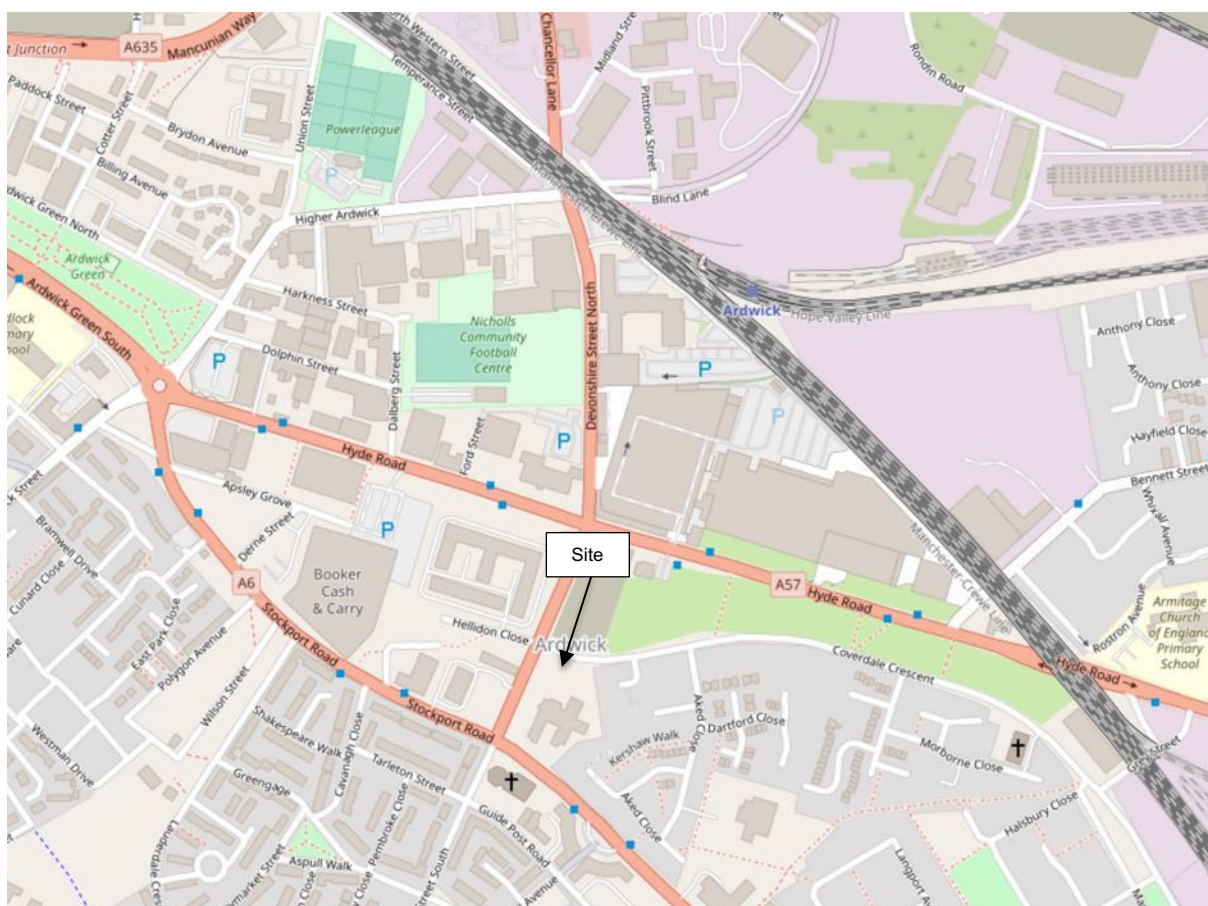


Figure 2.1: Site Location
[source: [IS04](#)]

Traffic Regulation Orders

- 2.10 On the Coverdale Crescent site frontage has no parking controls except for double yellow line protection markings at the junction with Devonshire Street. On the Devonshire Street site frontage double yellow line controls are in place.
- 2.11 There are no loading restrictions on the site frontage.

Road Safety Record

- 2.12 TfGM's accident database has been used to establish the road collision patterns surrounding the site. The data presents all personal injury accidents occurring for the most recent five-year period available. The database states that the latest data update was undertaken in March 2023.
- 2.13 Given the scale of the development the study area has been limited to the links fronting the site and the junction of Coverdale Crescent / Devonshire Street.
- 2.14 Figure 2.2 shows that there have been no accidents on the Coverdale Crescent or Devonshire Street site frontage during the period assessed.
- 2.15 There have been two accidents at the crossroad junction of Coverdale Crescent / Devonshire Street. The accidents occurred in 2017 and 2020 and were both classified as slight. Neither of the accidents involved a pedestrian or cyclist.
- 2.16 The accident data does not indicate a prevalent accident issue on the roads fronting the site or at the Coverdale Crescent / Devonshire Street.

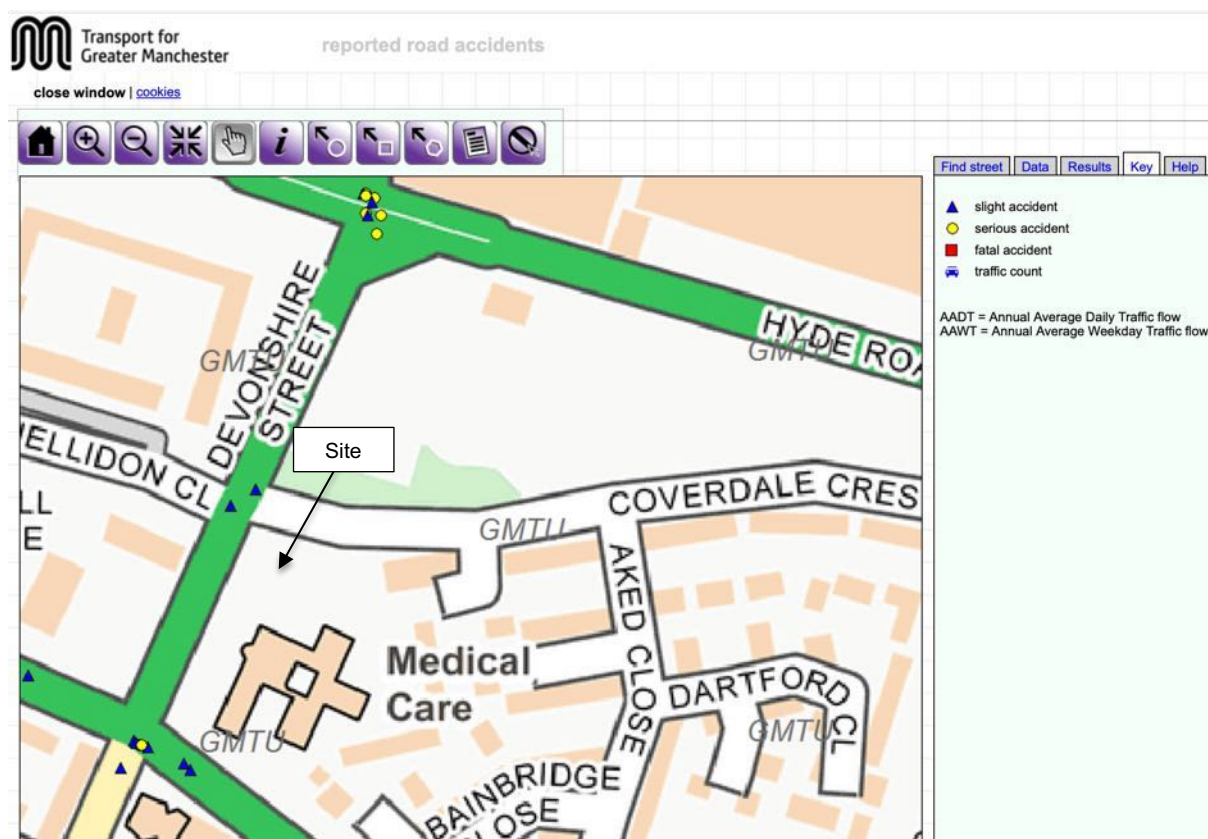


Figure 2.2: Accident Data
[source: TfGM]

3 Proposed Development

- 3.1 The proposed layout is attached as Appendix A.
- 3.2 A C3(a) residential development is proposed that will provide 24 flats.
- 3.3 Vehicle access to the site will be provided from a new priority junction formed on Coverdale Crescent. The proposed site access layout is attached as Appendix B. This shows that the junction will be a simple priority arrangement and that visibility splays of 2.4m by 33m are comfortably achievable.
- 3.4 A segregated pedestrian access to the site is provided from Coverdale Crescent and a footway is provided at the vehicle access junction. Tactile paving and dropped kerbs will be provided at the site access junction. Tactile paving will also be introduced at the junction with Coverdale Crescent / Devonshire Street.
- 3.5 MCC's parking standards are set out in Appendix B of the Core Strategy. This shows that MCC does not maintain any parking standards for residential land uses. Seven parking spaces are proposed, equating to a 29% provision. An assessment of the appropriateness of the parking level proposed is set out in Section 5.
- 3.6 All the parking spaces will be to EV standard and one disabled parking space will be provided.
- 3.7 A covered and secure cycle store is provided with space for 24 bikes to the rear of the property. Two cycle stands are provided at the main entrance for use by visitors (four spaces).
- 3.8 Servicing and refuse collection will be undertaken from kerbside on Coverdale Crescent, in line with the arrangements for existing residential properties. An area is provided for temporary storage of bins on collection day, clear of the footway.
- 3.9 An Interim Travel Plan has been prepared for the site and is attached as Appendix C.
- 3.10 A full Construction Management Plan will be prepared once a contractor has been appointed and the requirement to prepare and submit a full version will be dealt with by a suitably worded planning condition. In the meantime, draft measures are set out below.

- 3.11 It is anticipated that, for most of the construction period, activity will be confined to the site with the front part of the site, including the future parking area, serving as a compound whilst the building is constructed. Goods will be handled within the site and banksmen used for vehicle manoeuvring to and from Coverdale Crescent.
- 3.12 The final plan will identify any requirement to extend the working area and hoardings beyond the site boundary for any part of the construction period.
- 3.13 Other measures will be introduced to reduce the effects on the highway network and consideration will be given to the following:
 - Construction hours and delivery hours will be agreed with MCC to reduce amenity effects and impact on the peak hour highway network.
 - Measures will be used to control the emission of dust and dirt, including wheel washing before going out of the site.
 - All contractors will park in identified locations either in the site or other locations by arrangement of the contractor.
 - Appropriate hoarding and signage will be used at the site.
 - All storage, loading and unloading of plant and materials will occur within the site, with appropriate turning space provided for large vehicles.
 - An appropriate scheme will be put in place for recycling / disposing of waste resulting from the construction works.
 - The site set up will include appropriate facilities for the work force, including health & safety.
 - Site lighting will be used to provide sufficient illumination for the site construction, but not providing any glare to nearby road users.

4 Accessibility Assessment

Active Travel Routes: Walking

- 4.1 A segregated pedestrian access to the site is provided from Coverdale Crescent in addition to footway provision at the vehicle access junction. Tactile paving and dropped kerbs will be provided at the site access junction.
- 4.2 On the site frontage Coverdale Crescent has a 3.5m footway on the southern side of the road (site-side). The road is subject to a 20mph speed limit and traffic calming features are in place, making it a suitable environment for pedestrian trips.
- 4.3 To the west of the site Coverdale Crescent meets Devonshire Street and Hellidon Close at a crossroad priority junction. Dropped kerbs are present on the Coverdale Crescent arm of the junction, but no tactiles are provided. Tactile paving will be provided at the junction as part of the proposal.
- 4.4 Devonshire Street has 2m+ footways on both sides of the road.
- 4.5 Travelling south on Devonshire Street provides access to Stockport Road. Dropped kerbs with tactile paving are provided on the route to Stockport Road. The Devonshire Street / Stockport Road junction is signal controlled with advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossings can be used to access westbound bus stops located to the east and west of the junction. Further crossing facilities are available on Stockport Road, including a pedestrian refuge crossing, signal controlled crossing and tactile paving / dropped kerbs at side roads.
- 4.6 To the north of Devonshire Street meets Hyde Road at a signal-controlled junction. The junction has advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossing facilities can be used to access eastbound bus stops.
- 4.7 The road safety data in Section 2 shows that there have been no accidents involving pedestrians in the study area.
- 4.8 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km.
- 4.9 Figure 4.1 shows a 2km walking catchment from the site. This shows that the site is within 500m of the retail facilities on Stockport Road. The retail facilities include a food retail store, pharmacy,

clothes store, barbers, food outlets, post office and a church. Access can also be gained to open space opposite the site and a community football centre within 500m. Plymouth Grove Medical Centre is under 1km from the site and Manchester city centre is just over 1km from the site.

- 4.10 The audit shows that the site is served by appropriate infrastructure and that access can be gained on foot to numerous amenities in the local area.

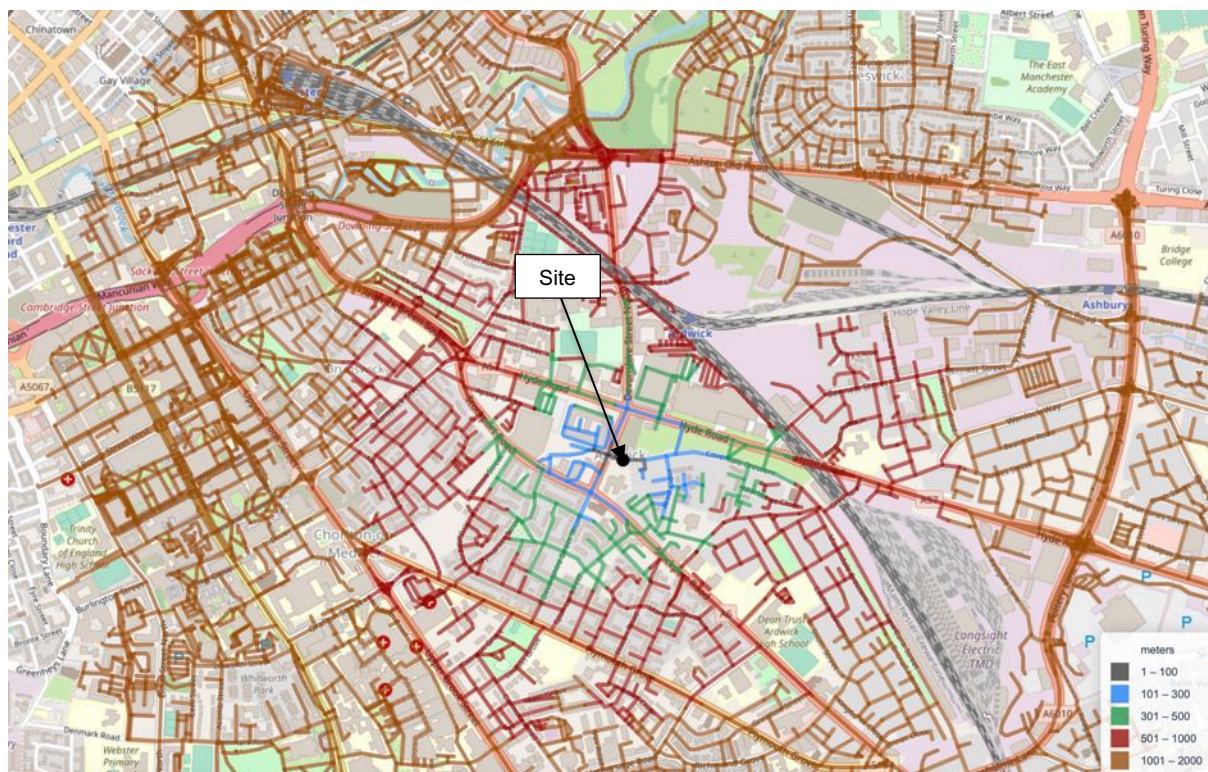


Figure 4.1: 2km Walk Catchment
[source: [IS04](#)]

Active Travel Routes: Cycling

- 4.11 The development includes 100% resident cycle parking and spaces are provided externally for visitors.
- 4.12 Figure 4.2 shows the cycle network serving the site and Figure 4.3 shows the Bee Network. Coverdale Crescent and the streets to the east of the site are 20mph routes with traffic calming, making them a suitable environment for cycle trips. Devonshire Street and Coverdale Crescent are also part of the Bee Network. Devonshire Street provides access to Hyde Road and Stockport Road which has formal cycle facilities.
- 4.13 The road safety data in Section 2 shows that there have been no accidents involving cyclists in the study area.
- 4.14 The assessment shows that site is well located for opportunities for access by cycle using existing infrastructure.

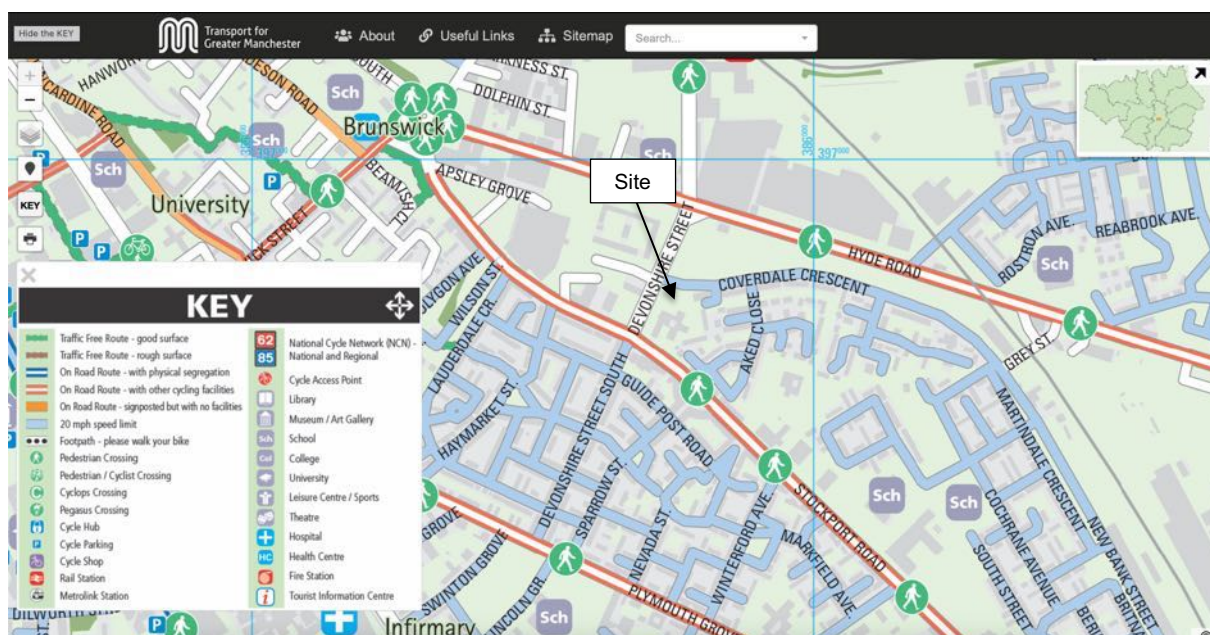


Figure 4.2: Cycle Network
[source: TfGM]

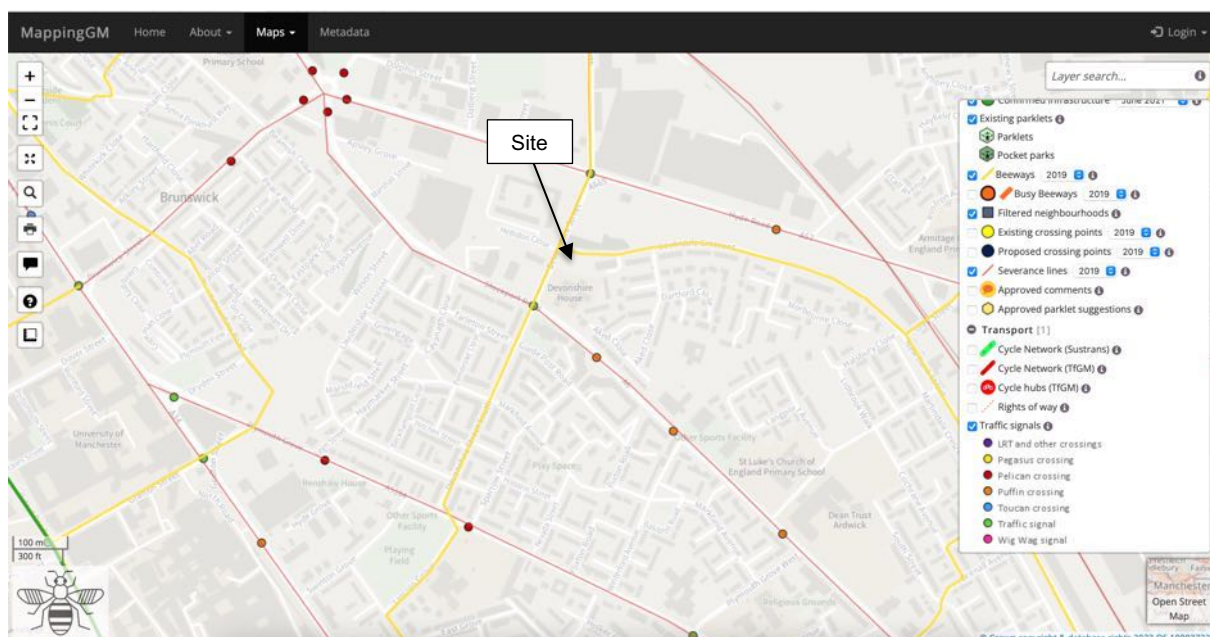


Figure 4.3: Bee Network
[source: TfGM]

Public Transport Routes

- 4.15 The nearest bus stops to the site are located on Stockport Road (200m) and Hyde Road (280m). The bus stops have shelters, timetable information and seating.
- 4.16 Crossing facilities are provided on the routes to both bus route corridors, except for tactile paving at the Coverdale Crescent / Devonshire Street junction which will be provided as part of the proposal.
- 4.17 Table 4.1 shows the frequency of buses serving the nearest stops.

No.	Route	Weekday (Buses per hour / each way)			Weekend (Buses per hour / each way)	
		Peak	Day	Evening	Saturday	Sunday
192	Manchester – Stockport – Hazel Grove	11	12	13	12	12
201	Manchester – Denton – Hyde	5	5	2	5	2
202	Manchester – Hyde – Gee Cross	2	2	2	2	1
203	Manchester – Reddish – Stockport	5	5	4	5	4
205	Manchester – Denton – Dane Bank	2	2	1	2	2

Table 4.1: Bus Routes
[source: TfGM]

- 4.18 Table 4.1 shows that the site is served by 26 buses per hour during the day. Bus services also provide coverage in the evening and at the weekend.
- 4.19 The site is located 700m to the south of Ardwick Station. The station is served by trains between Manchester and Glossop, with one service per hour in each direction during the week.
- 4.20 A Greater Manchester Accessibility Level (GMAL) calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM. This tool measures accessibility by public transport of a point of interest and provides a score between 1 and 8, where 1 is a low level of accessibility and 8 is the highest level of accessibility.
- 4.21 Figure 4.4 shows that the site has a GMAL of index of 7, which is a very high level of accessibility in a suburban area.

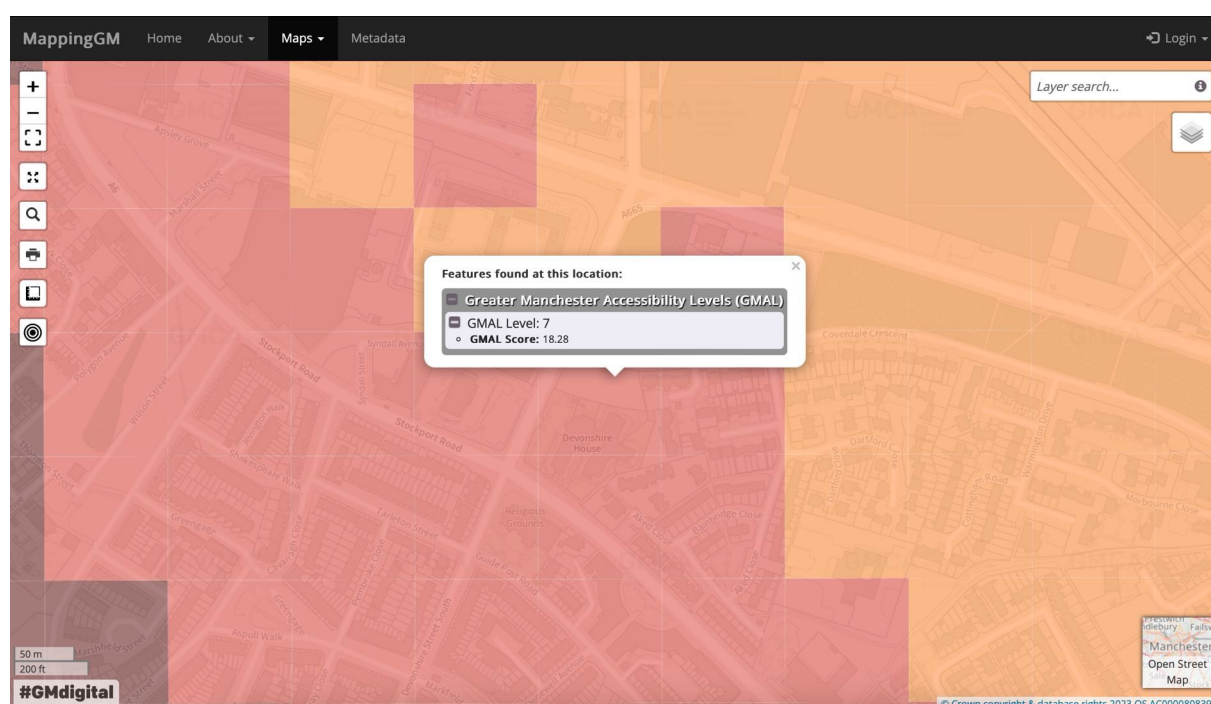


Figure 4.4: Greater Manchester Accessibility Level
[source: GM Mapping]

- 4.22 The assessment shows that the site is very well placed for public transport trips.

5 Impact Assessment

Trip Generation

- 5.1 The TRICS database is a standard appraisal tool that is commonly used in forecasting development trips as it contains survey data for numerous land uses across the UK.
- 5.2 The planning application seeks permission for C3 apartments and therefore it is required to use the associated TRICS land use class to assess the development impact. TRICS use class 03/Residential/D/Affordable Flats has been used in the assessment.
- 5.3 The TRICS assessment has been undertaken in line with latest TRICS practice guidance¹. Section 4 of the guidance (replicated below) it specifically states that the forecast should be based on adjustments to locational and accessibility qualities, rather than regions.

'Bearing in mind the results of our research, with hard data now being available, it is not considered good practice to exclude survey sites within the TRICS database on the sole basis of such sites being located in a specific region.'

- 5.4 In line with this, no adjustment has been made to the regions in the sample. Instead, the locational parameters have been set to reflect the site's location characteristics (town centre/edge of town centre).
- 5.5 The TRICS sample includes one Greater London site, which has a PTAL of 4. The proposal site has a GMAL score of 18.28, which equates to a PTAL of 4. The Greater London site therefore replicates the accessibility level of the proposal site.
- 5.6 The TRICS output is attached as Appendix D with a summary provided below.

	Vehicle Trip Rate			Person Trip Rate		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.05	0.117	0.167	0.095	0.48	0.575
PM Peak Hour	0.095	0.045	0.14	0.285	0.156	0.441
Daily	0.815	0.815	1.63	2.895	2.96	5.855

Table 5.1: Development Trip Rates (C3)

	Total Vehicle Trips			Person Trips		
	In	Out	Total	In	Out	Total
AM Peak Hour	1	3	4	2	12	14
PM Peak Hour	2	1	3	7	4	11
Daily	20	20	39	69	71	141

Table 5.2: Development Trips (C3)

Traffic Impact

- 5.7 Table 5.2 shows that the development will be associated with an insignificant level of traffic during the AM and PM peak periods, and across the day. The level of traffic generated by the development will not have an impact on transport or highway network operation.

¹TRICS Consortium Ltd (2022), TRICS Good Practice Guide 2023

Parking Assessment

- 5.8 The development proposes seven parking spaces, equating to a 29% provision.
- 5.9 MCC's parking standards are set out in the Core Strategy. MCC does not maintain any parking standards for residential land uses.
- 5.10 In the absence of policy standards reference has been made to car ownership data for the area within which the site sits (Manchester 018). The Census data (attached as Appendix D) shows that 65% of households living in flats in the area do not have a car based on all tenure types. When the tenure of the flats (affordable) is taken into account the level of households living in flats in area that do not own a car rises to 74%. Therefore, the car ownership data confirms that the level of parking proposed (29%) is appropriate for a C3 residential development of this accommodation type and tenure.

6 Conclusions

- 6.1 SK has been appointed to prepare a TS that examines the impact of a C3(a) residential development off Coverdale Crescent in the Ardwick area of Manchester. The development will provide 24 flats.
- 6.2 The scope of the assessment has been undertaken in line with standard appraisal methods and in line with local and national guidelines.
- 6.3 The proposed development includes the provision of a new car park access on Coverdale Crescent, this will be a kerbed bellmouth arrangement with a dropped kerb crossing point and tactile paving. Internally, car and cycle parking are provided including accessible parking and electric vehicle charging spaces.
- 6.4 A full accessibility assessment has been undertaken that shows that the site is well located with opportunities for walking, cycling and public transport access. The site is served by active travel and public transport infrastructure that is suitable for use by future residents. The site is located close to local amenities and is well positioned for access to frequency bus services. The site has a GMAL of 7, which is a high level of accessibility for a suburban area.
- 6.5 A trip assessment has been undertaken and this shows that the proposal will be associated with an insignificant level of trips during the peak hours and across the day. It is also shown that there are no accident hotspots in the study area.
- 6.6 The assessment confirms that the proposal will not result in a severe impact on the transport network and the parking level proposed is appropriate for the proposed land use.

Appendix A



2 no - 1 Bedroom M4[3] Units
Apartments @ 50m²

22 no - 1 Bedroom Units
Apartments @ 37m²

Total - 24no Units

GIFA: 1423m²

Total - 7no Car Parking Spaces

Drawing Title: Proposed Ground Floor Plan

Date: 06/06/2023

Drawing no: 1326-101

Scale: 1:200 @ A3

Drawn: NS

revision: E

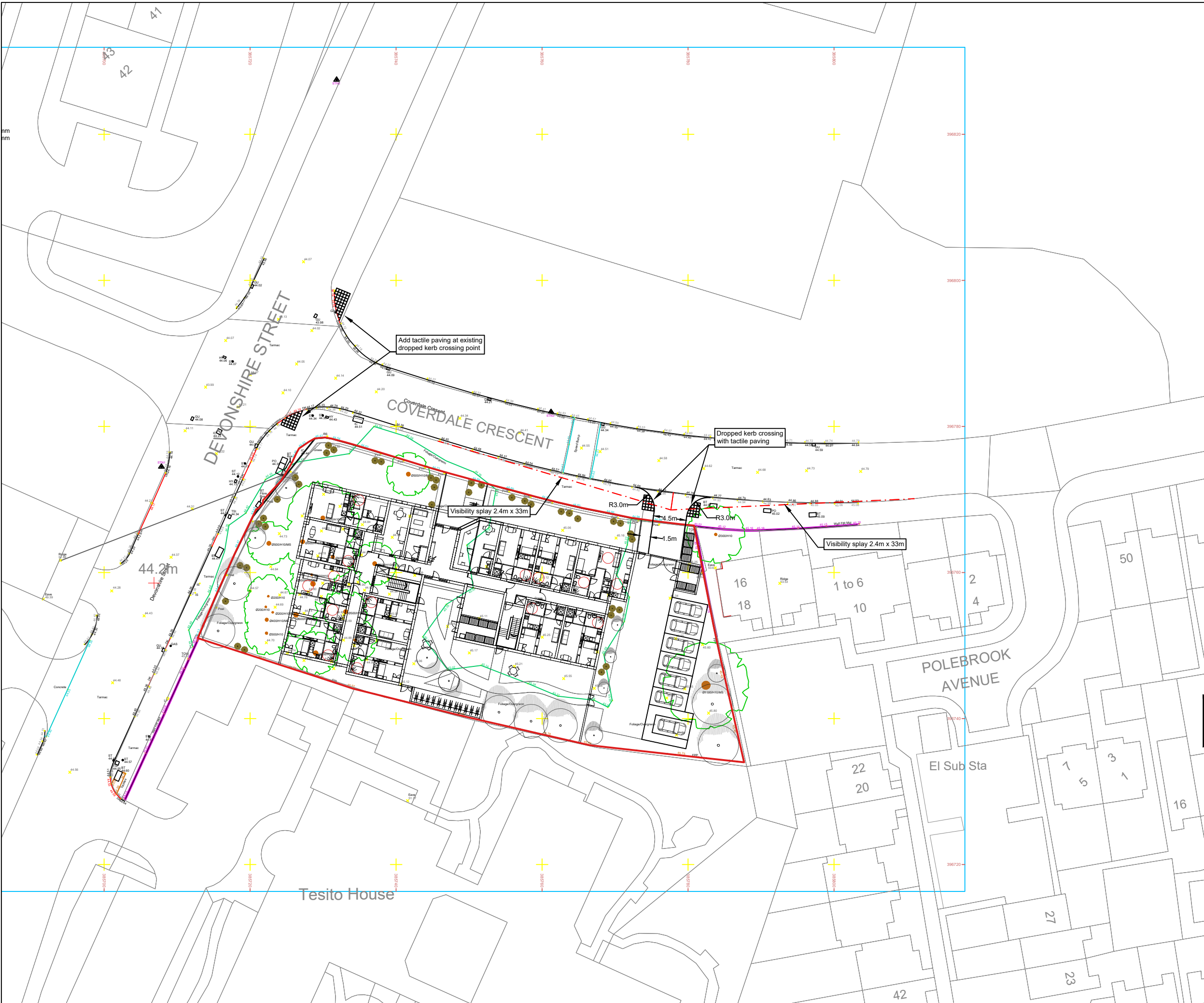
revision notes:

C 13/09/2023 Plan adjusted due to drainage easement

D 25/09/2023 Building position adjusted to suit easement.

E 12/10/2023 Car park arrangement updated, additional cycle stores added and bin stores updated following comments from consultants

Appendix B



THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

NOTES
Layout subject to detailed design and confirmation of statutory undertakers' equipment.

Revision Details	By	Date	Suffix
	Check		

Drawing Number

SK22361-001

Coverdale Crescent, Manchester

Drawing Title

Proposed Site Access
General Arrangement

Scale at A3

1:500

Drawn	Approved
JAT	LGS
Check	Date
LGS	12.10.23

SK Transport Planning Ltd
Albion Wharf | Manchester | M1 5LN
www.sktransport.co.uk
0161 234 6509

Appendix C

Residential Development
Coverdale Crescent, Ardwick, Manchester
Interim Travel Plan
231204/SK22361/ITP01(-03)

Contents

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SK22361	ITP01	03	Final Draft	L Speers	LGS	04/12/2023

1 Introduction

Background

- 1.1 SK has been appointed to prepare an Interim Travel Plan for a C3(a) residential development off Coverdale Crescent in the Ardwick area of Manchester.
- 1.2 A Transport Statement (TS) has been prepared for the planning application and this should be referred to for full details of the development proposals and the transport implications. Details of the development relevant to the Travel Plan are summarised below.

Development Overview

- 1.3 The proposed layout is attached as Appendix A of the TS.
- 1.4 A C3(a) residential development is proposed that will provide 24 flats.
- 1.5 Vehicle access to the site will be provided from a new priority junction formed on Coverdale Crescent. The proposed site access layout is attached as Appendix B of the TS. This shows that the junction will be a simple priority arrangement and that visibility splays of 2.4m by 33m are comfortably achievable.
- 1.6 A segregated pedestrian access to the site is provided from Coverdale Crescent and a footway is provided at the vehicle access junction. Tactile paving and dropped kerbs will be provided at the site access junction. Tactile paving will also be introduced at the junction with Coverdale Crescent / Devonshire Street.
- 1.7 MCC's parking standards are set out in Appendix B of the Core Strategy. This shows that MCC does not maintain any parking standards for residential land uses. Seven parking spaces are proposed, equating to a rate of 29%. An assessment has been made of the parking requirements associated with the development and this is set out in Section 5 of the TS.
- 1.8 All the parking spaces will be to EV standard and one disabled parking space will be provided.
- 1.9 A covered and secure cycle store is provided with space for 24 bikes to the rear of the property. Two cycle stands are provided at the main entrance for use by visitors (four spaces).
- 1.10 Servicing and refuse collection will be undertaken from kerbside on Coverdale Crescent, in line with the arrangements for existing residential properties. An area is provided for temporary storage of bins on collection day, clear of the footway.

2 Travel Plan Process, Benefits & Objectives

Travel Plan Process

- 2.1 The Travel Plan draws on the following guidance and best practice:
 - Chartered Institution of Highways & Transportation (2019), Better planning, better transport, better places
 - Department for Transport (2007), Making Residential Travel Plans Work
 - Department for Transport (2009), Delivering Travel Plans through the Planning Process
 - Manchester City Council (2007), The Guide to Development in Manchester SPD
 - Manchester City Council (2012), Manchester's Local Development Framework: Core Strategy Development Plan
 - Ministry of Housing, Communities & Local Government (2021), National Planning Policy Framework
 - Ministry of Housing, Communities & Local Government (2016), Planning Practice Guidance
 - Transport for Greater Manchester (2013), Transport for Sustainable Communities
 - Transport for Greater Manchester (2021), 2040 Vision for Transport

- 2.2 Paragraph 113 of NPPF states that all developments that generate a significant amount of movement should be accompanied by a Travel Plan. The glossary of NPPF¹ describes a Travel Plan as:

‘A long-term management strategy for an organization or site that seeks to deliver sustainable transport objectives and is regularly reviewed.’

- 2.3 A Travel Plan is a tool for managing access to a site that sets out a management strategy that seeks to promote sustainable travel choices and reduce single occupancy car use to achieve stated objectives. It should contain a package of measures designed to meet the objective to reduce single-occupancy car use generated from the site by supporting sustainable modes of transport, where practicable.
- 2.4 A Travel Plan should include a mixture of site infrastructure, strategy, marketing, and communication measures to assist the plan to meet defined objectives. Within a Travel Plan there is a need to set targets and indicators, the purpose of which is to monitor change and review policies overtime to allow it to meet the needs of the users of a site.
- 2.5 A Travel Plan should also outline the existing accessibility of the site, infrastructure measures included as part of the development, and management and policy measures for adoption at the site to promote use of sustainable modes.
- 2.6 This version of the Travel Plan has been prepared for the planning application to set out the principles that will be adopted in the full Travel Plan for the site. The requirement to prepare a full Travel Plan will be a condition of planning.

Travel Plan Pyramid

- 2.7 The Department of Transport² (DfT) states that:

‘... it can be helpful to view a travel plan for a new development as a pyramid of measures and actions, which is constructed from the ground up, with each new layer building on the last and all set within the context of the outcomes sought.’

- 2.8 The DfT pyramid is shown in Figure 2.1.
- 2.9 At the bottom of the pyramid is the location of the site and characteristics of access to the site by all modes of travel. The location of the development provides the foundation for good accessibility and this is examined in Section 3 and 4 of the Plan.
- 2.10 At the next level the physical aspects of the proposed development are set out to allow acknowledgement of that some Travel Plan measures are built-in to the layout to influence travel, such as pedestrian access measures and car and cycle parking provision. These aspects are set out in Section 1 and 6.
- 2.11 The remaining levels outline the management, promotion and strategy measures that are to be adopted as part of the Travel Plan to reinforce the site location, infrastructure proposals and access opportunities. These are set out in Sections 5 and 6 of the Plan.
- 2.12 Section 7 sets out the monitoring plan which details how and when the travel plan will be reviewed. This includes how and when surveys will be undertaken, and the targets that will be set to meet the stated objectives.
- 2.13 Section 8 provides a summary of the actions identified in the Travel Plan along with timescales for implementation and funding / budget details.

¹ Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework

² Department for Transport (2009), Delivering Travel Plans through the Planning Process

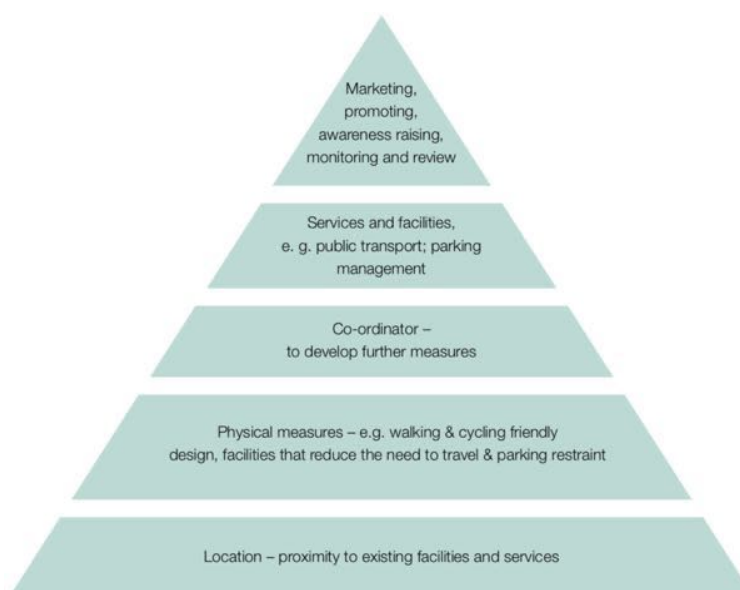


Figure 2.1: Travel Plan Pyramid
[source: DfT]

Travel Plan Benefits

- 2.14 Travel Plans result in a variety of health, financial, environmental and site operation benefits, which are set out below.
- 2.15 Reduced levels of single occupancy car use can lead to an improvement in air quality both surrounding the site and across the wider area. In addition, increases in active travel have very real impact on health as moderate physical activity can help prevent obesity, mental health issues, cancer, high blood pressure and cardiovascular disease.
- 2.16 The financial benefits of Travel Plans include personal cost savings from using more cost-effective modes of travel and indirect and wider cost savings relating to reduced illness and reduced accident rates.
- 2.17 The environmental benefits of Travel Plans include reduced carbon emissions and air quality issues.
- 2.18 Travel Plans also bring societal benefits including a happier and healthier community, and more social interaction.

Objectives

- 2.19 The objectives of the Travel Plan are to:
 - Objective 1:** To increase trips by active / sustainable modes of travel.
 - Objective 2:** To reduce the number of single occupancy site user car trips.

3 Site Location

Site Location

- 3.1 Figure 3.1 shows the location of the site.
- 3.2 The site is in Ardwick, to the south of the A57 Hyde Road and north of the A6 Stockport Road. The site is well located for access to local amenities, such as local retail facilities fronting Stockport Road, and public transport services.
- 3.3 The site is bounded to the north by Coverdale Crescent, to the east by residential properties, to the south by Devonshire House, and to the west by the A665 Devonshire Street.

Local Highway Network

- 3.4 Near the site, Coverdale Crescent is a 7.6m single carriageway road with a 2.5m – 3.5m footway on the southern side of the road (site-side). The road is subject to a 20mph speed limit and traffic calming features are in place (raised tables). The road has street lighting.
- 3.5 On the Coverdale Crescent site frontage has no parking controls except for double yellow line protection markings at the junction with Devonshire Street. On the Devonshire Street site frontage double yellow line controls are in place. There are no loading restrictions on the site frontage.
- 3.6 Travelling east on Coverdale Crescent provides access to residential properties to the east of the site.
- 3.7 At its western end, on the corner of the site, Coverdale Crescent meets Devonshire Street and Hellidon Close at a crossroad priority junction. Dropped kerbs are present on the Coverdale Crescent arm of the junction, but no tactiles are provided.
- 3.8 Travelling south on Devonshire Road provides access to Stockport Road. Stockport Road (A6) is part of the Key Route Network and is an important bus route corridor. Dropped kerbs with tactile paving are provided on the route to Stockport Road. The Devonshire Road / Stockport Road junction is signal controlled with advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossings can be used to access westbound bus stops located to the east and west of the junction. Further crossing facilities are available on Stockport Road, including a pedestrian refuge crossing, signal controlled crossing and tactile paving / dropped kerbs at side roads.
- 3.9 To the north of Devonshire Road meets Hyde Road at a signal-controlled junction. Hyde Road (A57) is part of the Key Route Network and is an important bus route corridor. The junction has advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossing facilities can be used to access eastbound bus stops.

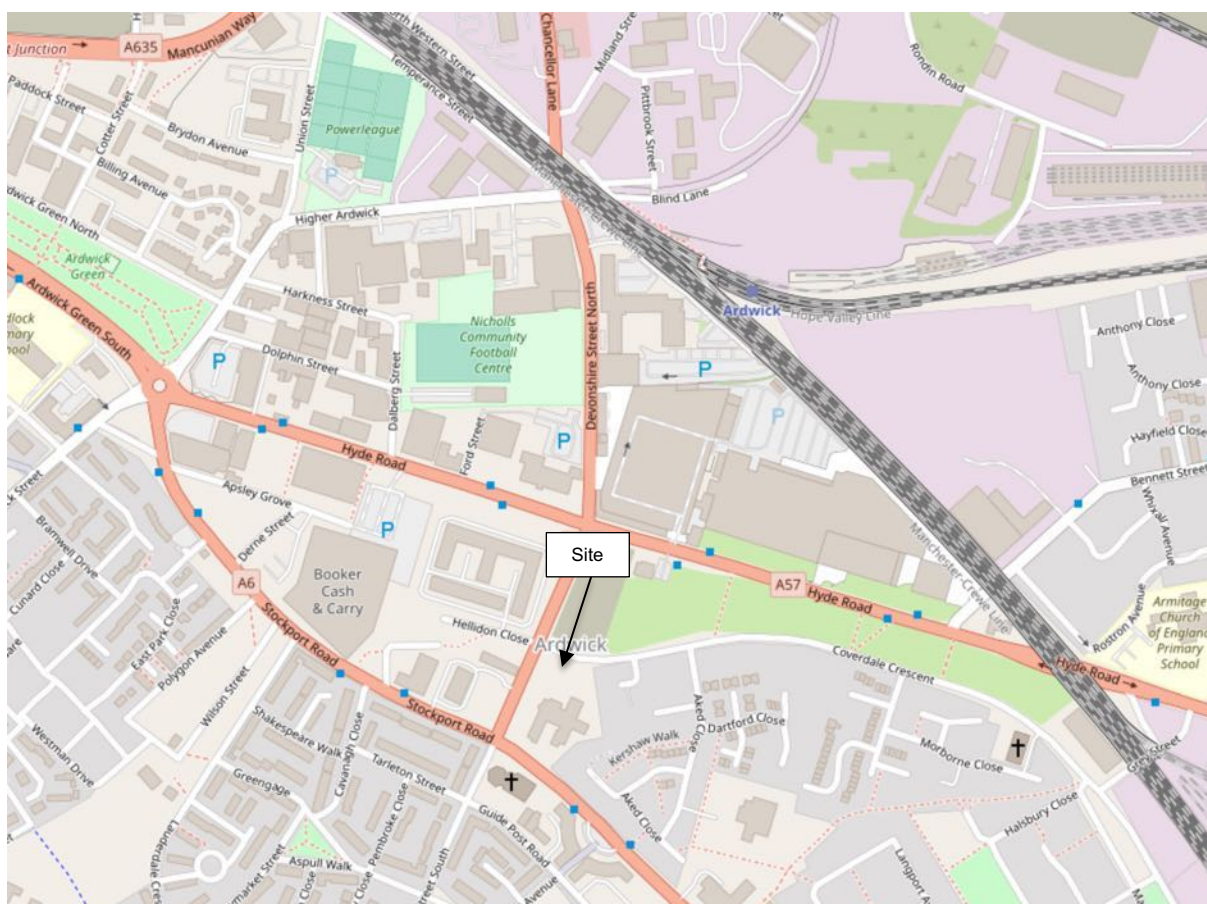


Figure 3.1: Site Location
[source: [IS04](#)]

Road Safety Data

3.10 Section 2 of the TS contains existing traffic flow, vehicle speed and road safety data.

4 Accessibility Audit

Active Travel Routes: Walking

- 4.1 On the site frontage Coverdale Crescent has a 3.5m footway on the southern side of the road (site-side). The road is subject to a 20mph speed limit and traffic calming features are in place, making it a suitable environment for pedestrian trips.
- 4.2 To the west of the site Coverdale Crescent meets Devonshire Street and Hellidon Close at a crossroad priority junction. Dropped kerbs are present on the Coverdale Crescent arm of the junction, but no tactiles are provided. Tactile paving will be provided at the junction as part of the proposal.
- 4.3 Devonshire Road has 2m+ footways on both sides of the road.
- 4.4 Travelling south on Devonshire Road provides access to Stockport Road. Dropped kerbs with tactile paving are provided on the route to Stockport Road. The Devonshire Road / Stockport Road junction is signal controlled with advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossings can be used to access westbound bus stops located to the east and west of the junction. Further crossing facilities are available on Stockport Road, including a pedestrian refuge crossing, signal controlled crossing and tactile paving / dropped kerbs at side roads.
- 4.5 To the north of Devonshire Road meets Hyde Road at a signal-controlled junction. The junction has advanced stop lines, tactile paving, and controlled pedestrian crossing facilities. The crossing facilities can be used to access eastbound bus stops.

- 4.6 The road safety data in Section 2 of the TS shows that there have been no accidents involving pedestrians in the study area.
- 4.7 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km.
- 4.8 Figure 4.1 shows a 2km walking catchment from the site. This shows that the site is within 500m of the retail facilities on Stockport Road. The retail facilities include a food retail store, pharmacy, clothes store, barbers, food outlets, post office and a church. Access can also be gained to open space opposite the site and a community football centre within 500m. Plymouth Grove Medical Centre is under 1km from the site and Manchester city centre is just over 1km from the site.
- 4.9 The audit shows that the site is served by appropriate infrastructure and that access can be gained on foot to numerous amenities in the local area.

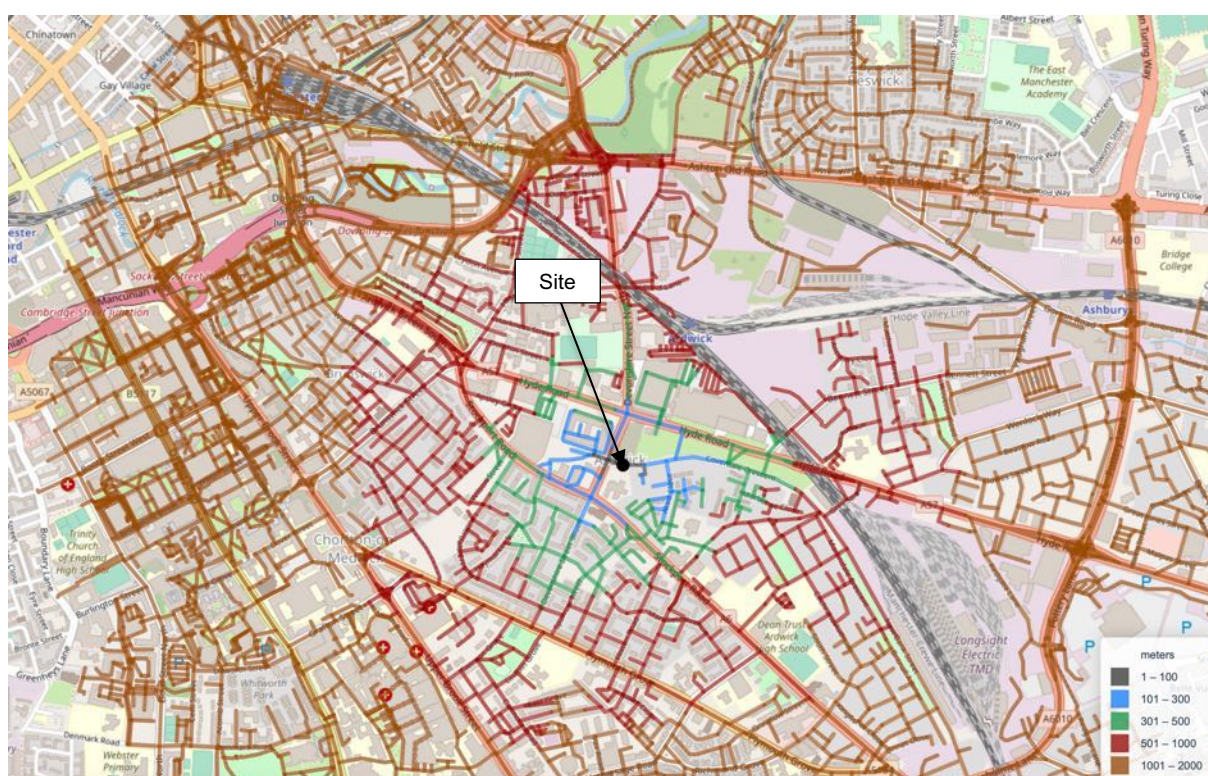


Figure 4.1: 2km Walk Catchment
[source: IS04]

Active Travel Routes: Cycling

- 4.10 Figures 4.2 and 4.3 shows the [cycle network](https://tfgm.pindarcreative.co.uk)³ and [Bee Network](https://mappinggm.org.uk/bee-network/)⁴ routes serving the site. Coverdale Crescent and the streets to the east of the site are 20mph routes with traffic calming, making them a suitable environment for cycle trips. Devonshire Street and Coverdale Crescent are also part of the Bee Network. Devonshire Street provides access to Hyde Road and Stockport Road which has formal cycle facilities.
- 4.11 The road safety data in Section 2 shows that there have been no accidents involving cyclists in the study area.
- 4.12 The site is also located within the [Cycle Hire Scheme Zone](https://beryl.cc/scheme/greater-manchester)⁵. Bikes are operated by Beryl and are available to hire via a dedicated phone app. The scheme launched in Summer 2022 providing pedal bikes and e-bikes across Manchester, Salford, and Trafford.

³ <https://tfgm.pindarcreative.co.uk>

⁴ <https://mappinggm.org.uk/bee-network/>

⁵ <https://beryl.cc/scheme/greater-manchester>

- 4.13 The assessment shows that site is well located for opportunities for access by cycle using existing infrastructure.

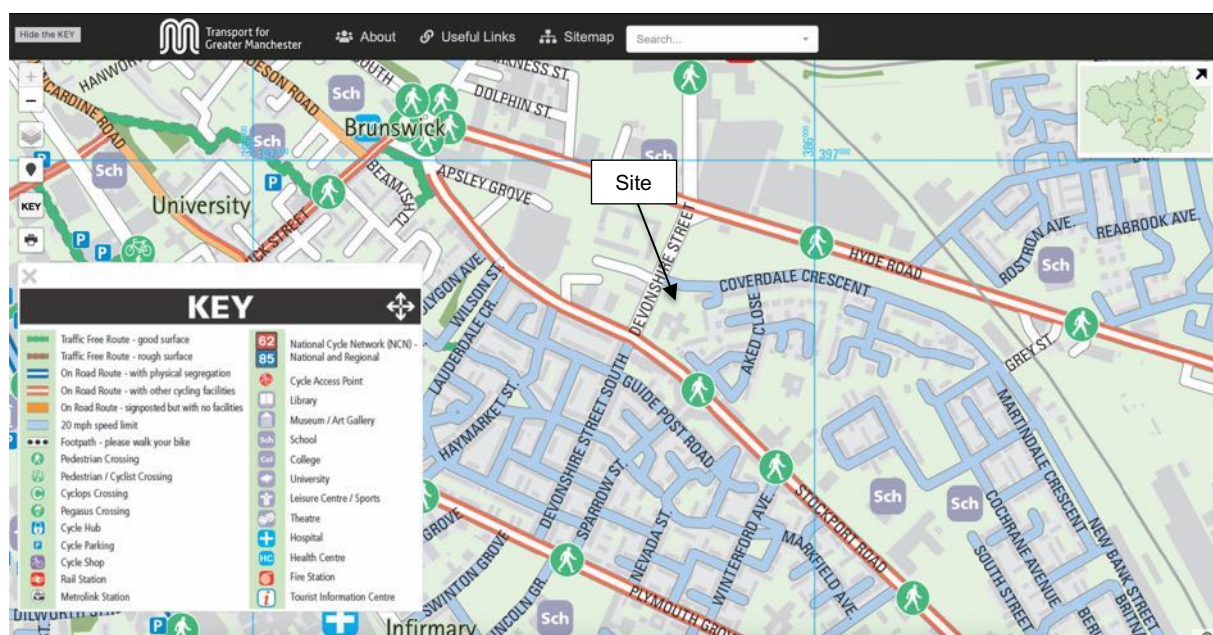


Figure 4.2: Cycle Network
[source: TfGM]

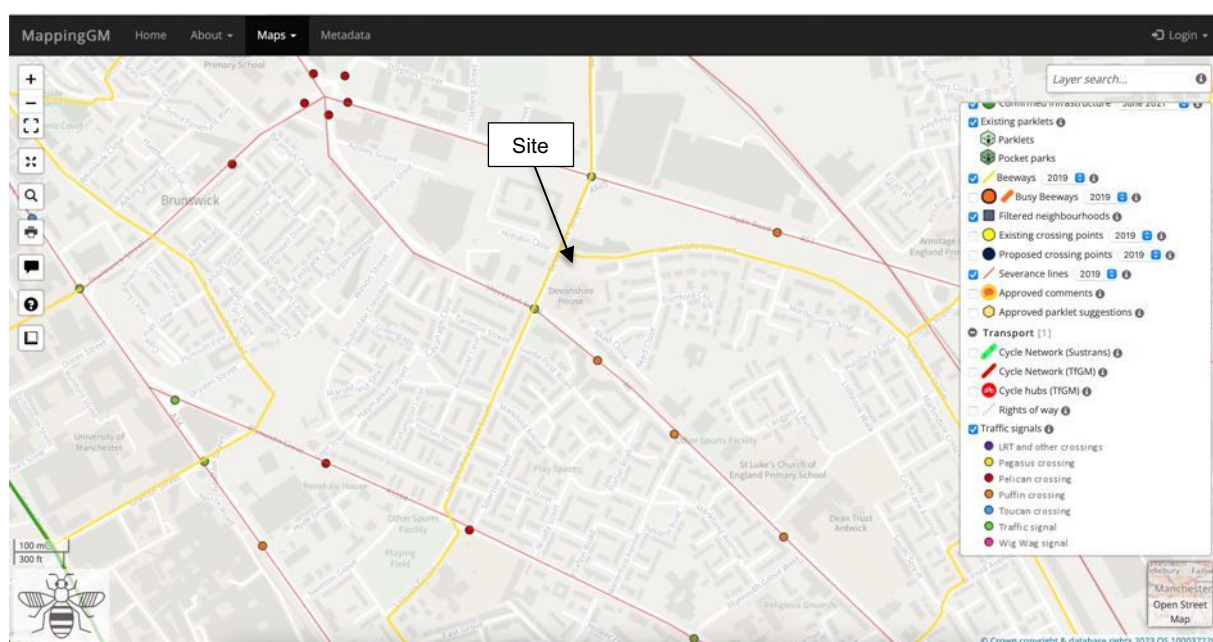


Figure 4.3: Bee Network
[source: TfGM]

Public Transport Routes

- 4.14 The nearest bus stops to the site are located on Stockport Road (200m) and Hyde Road (280m). The bus stops have shelters, timetable information and seating.
- 4.15 Table 4.1 shows the frequency of buses serving the nearest stops. Details of these services is provided in Table 4.1 and timetables are available from the [TfGM website](https://tfgm.com/bus/timetables)⁶.

⁶ <https://tfgm.com/bus/timetables>

No.	Route	Weekday (Buses per hour / each way)			Weekend (Buses per hour / each way)	
		Peak	Day	Evening	Saturday	Sunday
192	Manchester – Stockport – Hazel Grove	11	12	13	12	12
201	Manchester – Denton – Hyde	5	5	2	5	2
202	Manchester – Hyde – Gee Cross	2	2	2	2	1
203	Manchester – Reddish – Stockport	5	5	4	5	4
205	Manchester – Denton – Dane Bank	2	2	1	2	2

Table 4.1: Bus Routes
[source: TfGM]

- 4.16 Table 4.1 shows that the site is served by 26 buses per hour during the day. Bus services also provide coverage in the evening and at the weekend.
- 4.17 The site is located 700m to the south of [Ardwick Station](#)⁷. The station is served by trains between Manchester and Glossop, with one service per hour in each direction during the week.
- 4.18 A [Greater Manchester Accessibility Level](#)⁸ (GMAL) calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM. This tool measures accessibility by public transport of a point of interest and provides a score between 1 and 8, where 1 is a low level of accessibility and 8 is the highest level of accessibility.
- 4.19 The TS shows that the site has a GMAL of index of 7, which is a very high level of accessibility in a suburban area.

5 Plan Management

Management Structure

- 5.1 An effective Travel Plan needs a clear hierarchy of responsibility. The applicant has been closely involved in the development of the Travel Plan and is committed to its successful implementation.
- 5.2 The applicant will continue to have an overseeing role in the progress of the Plan and is committed to funding the resources required for its implementation.
- 5.3 The applicant will appoint a Travel Plan Co-ordinator prior to occupation of the development.

Travel Plan Co-ordinator

- 5.4 Travel Plan Co-ordinators play an important role in developing, managing, and promoting Travel Plans. A Travel Plan Co-ordinator for the site will be identified prior to occupation.
- 5.5 The Travel Plan Co-ordinator will be responsible for the day-to-day running of the Travel Plan and will also develop, implement, market, and monitor the Travel Plan's effectiveness.
- 5.6 In summary, the Travel Plan Co-ordinator's main responsibilities are:
- Implementing the Plan measures.
 - Providing a point of contact for site users and the Council.
 - Publicising and raising awareness of local and national initiatives.
 - Preparing and issuing the travel packs.
 - Maintaining a travel noticeboard for site users.

⁷ <https://tfgm.com/public-transport/train>

⁸ <https://www.gmtu.gov.uk/qmbusroute/GMAL%20Calculation%20Guide.pdf>

- Providing regular updates to site users on changes to local services and facilities.
- Monitoring and surveying travel patterns.
- Periodically reporting to the Council.

- 5.7 Should the Travel Plan Co-ordinator at the site change then the applicant will provide the Council with the replacement's full contact details in a timely manner.

Future Management & Handover Arrangements

- 5.8 Should the interest in the site be sold, the responsibility for the Travel Plan implementation will transfer to the successor in title. If this should be the case, then full contact details of the new site owner and the new Travel Plan Co-ordinator will be provided to the Council in a timely manner to allow the Travel Plan to continue uninterrupted at the site.

6 Measures Toolkit

Communication Measures

- 6.1 Good communication is a vital component of the Travel Plan to ensure that site users are fully aware of the options available to them. The measures set out in the Travel Plan will be continually and clearly communicated to site users to maximise effectiveness and encourage greater levels of take-up. The communications strategy is a vital component of the Travel Plan as it will be used to ensure that site users are aware of the travel options and initiatives available to them and will be the means of communicating the progress of the Plan. The Travel Plan Co-ordinator will be responsible for marketing and promoting the Travel Plan and providing and disseminating information to site users.
- 6.2 The Travel Plan Co-ordinator will be responsible for marketing and promoting the Travel Plan. The following measures will be used to promote and market the Travel Plan:
1. Distribution of promotional materials / updates to site users.
 2. Preparation and maintenance of a travel noticeboard for site users in a communal area.

Information Resources

- 6.3 Travel packs and travel noticeboards are an important means of disseminating information and making sure that site users are aware of the travel choices available to them.
- 6.4 The travel packs will contain the following types of information:
1. Travel Plan Co-ordinator contact details.
 2. Information on on-line and phone app journey planning software.
 3. Information on cycle and walking routes.
 4. Information on bus routes and frequencies.
 5. Information on bus ticketing arrangements.
- 6.5 A travel noticeboard will be provided in a communal area for site users and will contain similar information to the travel packs.

Journey Planning

- 6.6 Site users will be encouraged to familiarise themselves with the following journey planning resources:
- [TfGM journey planning software](https://tfgm.com/plan-a-journey)⁹
 - [Public transport maps](https://tfgm.com/maps)¹⁰
 - [Active Travel route software](https://beeactive.tfgm.com)¹¹

⁹ <https://tfgm.com/plan-a-journey>

¹⁰ <https://tfgm.com/maps>

¹¹ <https://beeactive.tfgm.com>

- [Walking and cycling route maps](#)¹²
- Links to [Google Play](#)¹³ and [Apple Store](#)¹⁴ Bee Network app

- 6.7 The Travel Plan Co-ordinator will also offer a personal travel planning service to help site users that require it.

Active Travel Measures

- 6.8 Active travel provides the following benefits:

- **Builds activity into your daily routine.**
It'll help to meet the government guidelines which recommend young people get at least 60 minutes of physical activity every day and that adults should get at least 150 minutes of moderate activity per week.
- **Boost your mental health and wellbeing.**
According to the Mental Health Foundation physical activity increases mental alertness and helps to reduce stress and anxiety.
- **Fewer cars equals cleaner air.**
You experience five times higher pollution levels in a car than walking or on a bike.
- **Save your family money.**
Not only will less money be spent on petrol, but money can also be saved on gym or fitness centre fees.
- **You'll arrive feeling ready to start the day.**
People who walk and cycle arrive at work more relaxed and alert than those who travel by car.

- 6.9 Section 4 confirms that the site relates well to existing active travel routes. The Travel Plan Co-ordinator will provide information on these routes to site users via the noticeboard and travel packs.

- 6.10 A segregated pedestrian access to the site is provided from Coverdale Crescent and a footway is provided at the vehicle access junction. Tactile paving and dropped kerbs will be provided at the site access junction. Tactile paving will also be introduced at the junction with Coverdale Crescent / Devonshire Street. A secure cycle store is provided with space for 24 bikes and four visitor cycle parking spaces are provided at the main entrance.

- 6.11 The Travel Plan Co-ordinator will be responsible for raising awareness of the health benefits of active travel using the travel pack and travel noticeboards.

- 6.12 The Travel Plan Co-ordinator will provide walking and cycling safety tips by providing site users with resources provided by [TfGM](#)¹⁵, [GMWalking](#)¹⁶, [Sustrans](#)¹⁷ and [Cycling UK](#)¹⁸.

- 6.13 TfGM provides [cycle training sessions](#)¹⁹ for adults. This scheme will be promoted to site users.

- 6.14 The Travel Plan Co-ordinator will provide information to site users on how they can try cycling, without committing to the purchase of a bike. Resources that will be used include the [Beryl Bike Hire Scheme](#)²⁰, [TfGM's Bike Libraries](#)²¹ lending scheme, and a [number of charities](#)²² that provide bike loan services.

¹² <https://tfgm.pindarcreative.co.uk>

¹³ <https://play.google.com/store/apps/details?id=com.tfgm.beenetwork>

¹⁴ <https://apps.apple.com/gb/app/bee-network/id1669705230>

¹⁵ <https://beeactive.tfgm.com>

¹⁶ <https://gmwalking.co.uk>

¹⁷ www.sustrans.org.uk/

¹⁸ www.cyclinguk.org/

¹⁹ <https://beeactive.tfgm.com/cycling/courses-and-bike-maintenance/>

²⁰ <https://beryl.cc/scheme/greater-manchester>

²¹ <https://beeactive.tfgm.com/cycling/bike-libraries/>

²² <https://beeactive.tfgm.com/cycling/get-a-bike/>

Public Transport Measures

- 6.15 Section 4 shows that the site is well located for access to frequent bus services on Stockport Road and Hyde Road. The Travel Plan Co-ordinator will provide information on these routes to site users via the travel packs and noticeboard.
- 6.16 The Travel Plan Co-ordinator will make sure that site users are aware of ticketing arrangements using information from [TfGM ticketing information](#)²³.
- 6.17 The following ticketing incentives are currently offered in Greater Manchester:
- [Bus Travel](#)²⁴
Adult single fares are capped at £2 and day tickets capped at £5. Weekly adult tickets are available for £21. Individual bus operators may provide their own weekly bus ticket but the 7 Day Any Bus Adult travelcard allows travel all week with any operator in Greater Manchester.
 - [Tram Travel](#)²⁵
The Clipper ticket provides 10 days' travel for the price of 9 with journeys that can be taken over 56 days. The Contactless Early Bird Bonus saves money on travel before 7am on weekdays. Weekly Contactless is capped at £31 even if you travel in all zones.
 - [Train Travel](#)²⁶
The Flexi Season Ticket offers 8 days of travel in 28 days – anytime between two named stations.
- 6.18 TfGM offer Greater Manchester's 18-21 year-old residents who were recently in the care system free bus travel. The Travel Plan Co-ordinator will discuss with any site users whether they may qualify for the [Our Pass](#)²⁷ scheme and will help with the application.
- 6.19 TfGM also offer a bus pass for older people. The Travel Plan Co-ordinator will discuss with any site users whether they may qualify for the [Older Person Free Travel](#)²⁸ scheme and will help with the application.

7 Monitoring & Review Mechanisms

Baseline Travel Patterns

- 7.1 Surveying and monitoring travel patterns is an important tool in measuring the progress of the Travel Plan and success of the Plan in terms of meeting the declared objectives and targets.
- 7.2 Baseline site user travel surveys will be undertaken within six months of occupancy of the development using a simple questionnaire.
- 7.3 The results from the first survey will be used to set the targets for the Travel Plan and to update the measures, if required. The updated Travel Plan will be submitted to the Council within three months of completion of the baseline / first surveys.

Monitoring Surveys

- 7.4 Surveys will be undertaken every two years for a period of five years (baseline / year one, year three and year five). Following each survey period, a short monitoring report will be issued to the Council for discussion. The monitoring report will be issued within three months of each survey period.

²³ <https://tfgm.com/tickets-and-passes/find-a-ticket>

²⁴ <https://tfgm.com/get-on-board>

²⁵ <https://tfgm.com/tickets-and-passes/ways-to-pay/smart-card>

²⁶ <https://www.northernrailway.co.uk/tickets/flexi>

²⁷ <https://tfgm.com/tickets-and-passes/care-leavers>

²⁸ <https://tfgm.com/tickets-and-passes/travel-pass-for-older-people>

Exercise	Key Information	Frequency	Responsibility
Issue of travel packs / set up noticeboard	Dissemination of travel information and travel survey to site users	On occupation	Travel Plan Co-ordinator
Baseline site users surveys	Data to be used to establish baseline trip patterns and to allow appropriate targets to be set	Within 6 months of occupation / final Travel Plan to be submitted within 3 months of survey completion (Year 1)	Travel Plan Co-ordinator
Updated Travel Plan	Travel Plan updated with survey and targets firmed up	Within 3 months of the survey	Travel Plan Co-ordinator
Monitoring surveys	Data to be used to establish progress of the Plan and review success of measures	Year 3 and Year 5	Travel Plan Co-ordinator
Preparation of Monitoring Report	Set out mode share, targets, and any changes proposed to the Plan	3 months after each monitoring survey period	Travel Plan Co-ordinator

Table 7.1: Monitoring Plan

Targets

- 7.5 Targets are measurable goals against which the progress of the Travel Plan can be assessed. Targets should be SMART – Specific, Measurable, Achievable, Realistic and Time-Related.
- 7.6 The targets are split into two different types, Output Targets and Outcome Targets. Output Targets are non-quantifiable and action-based that need to be achieved in a set time period. Outcome Targets are quantifiable and will be based on the results of the travel surveys.
- 7.7 The following Output Targets have been set for the Travel Plan:
- Appoint Travel Plan Co-ordinator on occupation.
 - Provide travel packs and a travel noticeboard in a communal area.
 - Undertake the baseline travel surveys within 6 months of occupation.
 - Update the Travel Plan and issue to the Council within 3 months of survey.
 - Undertake monitoring travel surveys in years 3 and 5.
 - Prepare a monitoring report and issue to the Council within 3 months of each monitoring survey.
- 7.8 The Outcome Target for the Travel Plan is to reduce the proportion of site users travelling by single occupancy car trips from the baseline mode share. The baseline mode share will be established on completion of the baseline / year one surveys and at this point a quantitative target will be set. Preliminary Outcome Targets are set out in Table 7.2.

Provision of Travel Packs / Noticeboard

Specific	The Travel Plan Co-ordinator will arrange travel packs and a noticeboard. These resources will be kept up to date.
Measurable	Verified as part of the monitoring reports.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	The travel packs will be provided to new site users. A noticeboard will be located in a communal area.
Timebound	Ongoing.

Undertake travel surveys

Specific	Site user travel patterns will be periodically monitored.
Measurable	Will be recorded as part of the baseline and monitoring survey programme.
Achievable	Will be the responsibility of the Travel Plan Co-ordinator.
Realistic	Surveys will be undertaken in line with monitoring plan.
Timebound	Ongoing.

Reduce the number of single occupancy site user car trips

Specific	Reduce single occupancy car travel (commuting trips).
Measurable	Verified using the baseline and monitoring surveys. Quantifiable targets to be set following baseline surveys.
Achievable	The site sits in an accessible location offering good potential for mode shift.
Realistic	Yes.
Timebound	During lifetime of the Plan.

Table 7.2: Preliminary Travel Plan SMART Targets

8 Interim Action Plan & Funding

- 8.1 The applicant is committed to the implementation and successful delivery of the Travel Plan's measures to meet the stated objectives and has confirmed that it will fund the costs associated with the operation and implementation of the full Travel Plan.

Measure	Action	Responsibility	Target Delivery / Method
Management / Monitoring	Appoint Travel Plan Co-ordinator	Applicant	Prior to occupation
	Confirm Travel Plan Co-ordinator details to Council	Applicant	On occupation
	Provide / maintain travel pack and noticeboard(s)	Travel Plan Co-ordinator	Prior to occupation / on-going with regular updates
	Baseline / Year 1 surveys	Travel Plan Co-ordinator	In line with monitoring programme
	Travel Plan update	Travel Plan Co-ordinator	Within 3 months of baseline survey
	Monitoring surveys	Travel Plan Co-ordinator	On-going in line with monitoring programme
	Monitoring Reports	Travel Plan Co-ordinator	Within 3 months of baseline survey
Active Travel	Provide development walking and cycling infrastructure	Applicant	As per development phasing
	Promote and support walking by distributing information set out in Section 6	Travel Plan Co-ordinator	Travel pack / noticeboard – on occupation / on-going
	Promote and support cycling by distributing information set out in Section 6	Travel Plan Co-ordinator	Travel pack / noticeboard – on occupation / on-going
Public Transport	Offer personalised journey planning for site users	Travel Plan Co-ordinator	On occupation / on-going
	Promote and support public transport by distributing information set out in Section 6. Regular review of services and ticketing	Travel Plan Co-ordinator	Travel pack / noticeboard – on occupation / on-going
Vehicles	Provide parking spaces, including EV charging facilities	Applicant	As per development phasing
	Promote car sharing	Travel Plan Co-ordinator	Travel pack – on occupation / on-going

Table 8.1: Action Plan

Appendix D

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	HG HARINGEY	1 days
02	SOUTH EAST	
	BH BRIGHTON & HOVE	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NG NOTTINGHAM	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days

Primary Filtering selection:

Parameter: No of Dwellings
 Actual Range: 15 to 90 (units:)
 Range Selected by User: 6 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 20/04/22

Selected survey days:

Tuesday	1 days
Wednesday	1 days
Thursday	2 days
Friday	1 days

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
------------------------------------	---

Selected Location Sub Categories:

Residential Zone	5
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Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	9 days - Selected

Secondary Filtering selection:

Use Class:

C3	5 days
----	--------

Population within 500m Range:

All Surveys Included

Population within 1 mile:

15,001 to 20,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	2 days

Population within 5 miles:

100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	2 days
500,001 or More	1 days

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	1 days

Travel Plan:

No	5 days
----	--------

PTAL Rating:

No PTAL Present	4 days
4 Good	1 days

LIST OF SITES relevant to selection parameters

1	AC-03-D-01	BLOCK OF FLATS		CHESHIRE WEST & CHESTER
	HEATH LANE			
	CHESTER			
	BOUGHTON HEATH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	30		
	Survey date: THURSDAY	24/05/12		Survey Type: MANUAL
2	BH-03-D-03	FLATS & HOUSES		BRIGHTON & HOVE
	WELLINGTON ROAD			
	BRIGHTON			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	15		
	Survey date: THURSDAY	16/10/14		Survey Type: MANUAL
3	HG-03-D-03	BLOCKS OF FLATS		HARINGEY
	COMMERCE ROAD			
	WOOD GREEN			
	WOODSIDE PARK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	90		
	Survey date: FRIDAY	26/09/14		Survey Type: MANUAL
4	LN-03-D-02	FLATS		LINCOLNSHIRE
	ADDISON DRIVE			
	LINCOLN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	22		
	Survey date: WEDNESDAY	01/07/15		Survey Type: MANUAL
5	NG-03-D-01	BLOCK OF FLATS		NOTTINGHAM
	WATCOMBE ROAD			
	NOTTINGHAM			
	CARRINGTON			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:	22		
	Survey date: TUESDAY	23/06/15		Survey Type: MANUAL

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 3.59

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.073	5	36	0.067	5	36	0.140
08:00 - 09:00	5	36	0.050	5	36	0.117	5	36	0.167
09:00 - 10:00	5	36	0.056	5	36	0.095	5	36	0.151
10:00 - 11:00	5	36	0.084	5	36	0.101	5	36	0.185
11:00 - 12:00	5	36	0.050	5	36	0.050	5	36	0.100
12:00 - 13:00	5	36	0.061	5	36	0.078	5	36	0.139
13:00 - 14:00	5	36	0.078	5	36	0.050	5	36	0.128
14:00 - 15:00	5	36	0.067	5	36	0.045	5	36	0.112
15:00 - 16:00	5	36	0.067	5	36	0.067	5	36	0.134
16:00 - 17:00	5	36	0.084	5	36	0.050	5	36	0.134
17:00 - 18:00	5	36	0.095	5	36	0.045	5	36	0.140
18:00 - 19:00	5	36	0.050	5	36	0.050	5	36	0.100
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.815			0.815			1.630

Parameter summary

Trip rate parameter range selected:15 - 90 (units:)

Survey date date range:01/01/10 - 20/04/22

Number of weekdays (Monday-Friday):5

Number of Saturdays:0

Number of Sundays:0

Surveys automatically removed from selection:0

Surveys manually removed from selection:0

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.011	5	36	0.011	5	36	0.022
08:00 - 09:00	5	36	0.006	5	36	0.006	5	36	0.012
09:00 - 10:00	5	36	0.000	5	36	0.000	5	36	0.000
10:00 - 11:00	5	36	0.000	5	36	0.000	5	36	0.000
11:00 - 12:00	5	36	0.000	5	36	0.000	5	36	0.000
12:00 - 13:00	5	36	0.006	5	36	0.006	5	36	0.012
13:00 - 14:00	5	36	0.011	5	36	0.011	5	36	0.022
14:00 - 15:00	5	36	0.006	5	36	0.006	5	36	0.012
15:00 - 16:00	5	36	0.006	5	36	0.006	5	36	0.012
16:00 - 17:00	5	36	0.000	5	36	0.000	5	36	0.000
17:00 - 18:00	5	36	0.000	5	36	0.000	5	36	0.000
18:00 - 19:00	5	36	0.000	5	36	0.000	5	36	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.046			0.046			0.092

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.000	5	36	0.000	5	36	0.000
08:00 - 09:00	5	36	0.011	5	36	0.000	5	36	0.011
09:00 - 10:00	5	36	0.006	5	36	0.017	5	36	0.023
10:00 - 11:00	5	36	0.000	5	36	0.000	5	36	0.000
11:00 - 12:00	5	36	0.000	5	36	0.000	5	36	0.000
12:00 - 13:00	5	36	0.000	5	36	0.000	5	36	0.000
13:00 - 14:00	5	36	0.000	5	36	0.000	5	36	0.000
14:00 - 15:00	5	36	0.000	5	36	0.000	5	36	0.000
15:00 - 16:00	5	36	0.000	5	36	0.000	5	36	0.000
16:00 - 17:00	5	36	0.000	5	36	0.000	5	36	0.000
17:00 - 18:00	5	36	0.000	5	36	0.000	5	36	0.000
18:00 - 19:00	5	36	0.000	5	36	0.000	5	36	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.017			0.034

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.000	5	36	0.011	5	36	0.011
08:00 - 09:00	5	36	0.006	5	36	0.011	5	36	0.017
09:00 - 10:00	5	36	0.000	5	36	0.017	5	36	0.017
10:00 - 11:00	5	36	0.011	5	36	0.006	5	36	0.017
11:00 - 12:00	5	36	0.000	5	36	0.006	5	36	0.006
12:00 - 13:00	5	36	0.000	5	36	0.000	5	36	0.000
13:00 - 14:00	5	36	0.000	5	36	0.000	5	36	0.000
14:00 - 15:00	5	36	0.017	5	36	0.011	5	36	0.028
15:00 - 16:00	5	36	0.000	5	36	0.000	5	36	0.000
16:00 - 17:00	5	36	0.011	5	36	0.017	5	36	0.028
17:00 - 18:00	5	36	0.011	5	36	0.006	5	36	0.017
18:00 - 19:00	5	36	0.000	5	36	0.000	5	36	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.085			0.141

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.084	5	36	0.084	5	36	0.168
08:00 - 09:00	5	36	0.056	5	36	0.145	5	36	0.201
09:00 - 10:00	5	36	0.067	5	36	0.123	5	36	0.190
10:00 - 11:00	5	36	0.106	5	36	0.128	5	36	0.234
11:00 - 12:00	5	36	0.061	5	36	0.061	5	36	0.122
12:00 - 13:00	5	36	0.101	5	36	0.095	5	36	0.196
13:00 - 14:00	5	36	0.078	5	36	0.050	5	36	0.128
14:00 - 15:00	5	36	0.089	5	36	0.067	5	36	0.156
15:00 - 16:00	5	36	0.106	5	36	0.084	5	36	0.190
16:00 - 17:00	5	36	0.128	5	36	0.056	5	36	0.184
17:00 - 18:00	5	36	0.089	5	36	0.061	5	36	0.150
18:00 - 19:00	5	36	0.067	5	36	0.061	5	36	0.128
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.032			1.015			2.047

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.039	5	36	0.084	5	36	0.123
08:00 - 09:00	5	36	0.034	5	36	0.173	5	36	0.207
09:00 - 10:00	5	36	0.089	5	36	0.112	5	36	0.201
10:00 - 11:00	5	36	0.106	5	36	0.089	5	36	0.195
11:00 - 12:00	5	36	0.106	5	36	0.084	5	36	0.190
12:00 - 13:00	5	36	0.101	5	36	0.123	5	36	0.224
13:00 - 14:00	5	36	0.123	5	36	0.140	5	36	0.263
14:00 - 15:00	5	36	0.117	5	36	0.112	5	36	0.229
15:00 - 16:00	5	36	0.223	5	36	0.140	5	36	0.363
16:00 - 17:00	5	36	0.134	5	36	0.101	5	36	0.235
17:00 - 18:00	5	36	0.123	5	36	0.084	5	36	0.207
18:00 - 19:00	5	36	0.134	5	36	0.084	5	36	0.218
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.329			1.326			2.655

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.006	5	36	0.095	5	36	0.101
08:00 - 09:00	5	36	0.000	5	36	0.151	5	36	0.151
09:00 - 10:00	5	36	0.011	5	36	0.045	5	36	0.056
10:00 - 11:00	5	36	0.011	5	36	0.034	5	36	0.045
11:00 - 12:00	5	36	0.006	5	36	0.022	5	36	0.028
12:00 - 13:00	5	36	0.017	5	36	0.073	5	36	0.090
13:00 - 14:00	5	36	0.045	5	36	0.022	5	36	0.067
14:00 - 15:00	5	36	0.039	5	36	0.034	5	36	0.073
15:00 - 16:00	5	36	0.089	5	36	0.011	5	36	0.100
16:00 - 17:00	5	36	0.095	5	36	0.034	5	36	0.129
17:00 - 18:00	5	36	0.061	5	36	0.006	5	36	0.067
18:00 - 19:00	5	36	0.095	5	36	0.011	5	36	0.106
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.475			0.538			1.013

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 3.59

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	36	0.128	5	36	0.274	5	36	0.402
08:00 - 09:00	5	36	0.095	5	36	0.480	5	36	0.575
09:00 - 10:00	5	36	0.168	5	36	0.296	5	36	0.464
10:00 - 11:00	5	36	0.235	5	36	0.257	5	36	0.492
11:00 - 12:00	5	36	0.173	5	36	0.173	5	36	0.346
12:00 - 13:00	5	36	0.218	5	36	0.291	5	36	0.509
13:00 - 14:00	5	36	0.246	5	36	0.212	5	36	0.458
14:00 - 15:00	5	36	0.263	5	36	0.223	5	36	0.486
15:00 - 16:00	5	36	0.419	5	36	0.235	5	36	0.654
16:00 - 17:00	5	36	0.369	5	36	0.207	5	36	0.576
17:00 - 18:00	5	36	0.285	5	36	0.156	5	36	0.441
18:00 - 19:00	5	36	0.296	5	36	0.156	5	36	0.452
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.895			2.960			5.855

Appendix D

RM001 - Accommodation type by car or van availability by number of usual residents aged 17 years or over in household
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population All households
units Households
date 2021
area type 2021 super output areas - middle layer
area name E02001062 : Manchester 018
number of people aged 17 years or over in household Total

Number of cars or vans	Total	Flats	Total	Flats
Total	3,571	1,141		
No cars or vans in household	1,732	743	49%	65%

RM131 - Tenure by car or van availability by number of usual residents aged 17 or over in household
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population All households
units Households
date 2021
area type 2021 super output areas - middle layer
area name E02001062 : Manchester 018
number of people aged 17 years or over in household Total

Number of cars or vans	Total	Rented	Total	Rented
Total	3,568	2,771		
No cars or vans in household	1,732	1,523	49%	55%

	No Cars
All Accommodation/All Tenure	49%
Flats/All Tenure	65%
Rented/All Accommodation Types	55%
Rented/Flats	74%
Rented/Flats with Cars	26%